Minerals Management Service

Outer Continental Shelf Scientific Committee Meeting

April 21-23, 2004

New Orleans, Louisiana

This meeting of the OCS Scientific Committee was held in accordance with the Federal Register Notice published on March 16, 2004, and followed the agenda contained in Appendix I. The meeting was attended by the Scientific Committee members, MMS staff, invited speakers, and visitors listed in Appendix II. A short biography of each Committee member, MMS staff who works closely with the Committee, and invited speakers is provided as an Attachment to Appendix II. An outline created from the verbatim transcripts and references to the page numbers of the transcripts which may be reviewed, and a list of acronyms used during this meeting are provided in Appendix III and IV respectively.

OUTER CONTINENTAL SHELF
SCIENTIFIC COMMITTEE
Plenary Session
April 21, 2004
New Orleans, Louisiana
Meeting Synopsis

INTRODUCTION

The Outer Continental Shelf (OCS) Scientific Committee (SC) is chartered under the Federal Advisory Committee Act (FACA) to advise the Minerals Management Service (MMS) on the feasibility, appropriateness, and scientific value of the MMS Environmental Studies Program (ESP). Its April 2004 meeting was called to order by Dr. James Kendall.

He explained that as a result of a request by the Secretary of the Department of the Interior (DOI) to review its advisory committees under the FACA, a number of findings suggested that the SC charter be updated, which entailed disbanding the former committee and chartering a new one. This has been accomplished, and appointments have been signed.

Since this was technically the first meeting of the new SC, there were no official Chair or Vice-chair. Previously, these positions were held by Drs. Lynda Shapiro and Bob Diaz, respectively, but were vacated with the disbandment of the previous SC. Since the new charter calls for a Chair, Vice-chair, and Parliamentarian, Dr. Kendall requested that the SC give some thought as to whom it would like to nominate to these positions.

He also explained that members of the SC were notified that they are now designated as Special Government Employees (SGE's), and with that designation comes a number of responsibilities. He then introduced Mr. Art Gary of the Ethics Office, who would explain these responsibilities.

Dr. Kendall then welcomed Mr. Robert LaBelle, the Deputy Associate Director for Offshore Minerals Management (OMM), who presented MMS's recent accomplishments and future directions.

MMS HQ PRESENTATION

Presentation by Mr. Robert LaBelle

Mr. LaBelle explained that neither the Director nor the Associate Director for OMM were able to attend this meeting due to prior commitments. However, the Director did want the SC to know that she appreciates its patience during its reorganization and praised its good scientific advice how MMS programs could better serve the public. Mr. LaBelle also assured the SC that he shares the Director's enthusiasm and respect for the important work it does, and he commended Dr. Kendall and his staff for planning this spring meeting.

He then introduced Mr. Dick Wildermann who will be retiring from MMS shortly. Throughout his career with MMS, Mr. Wildermann served as the Chief of the Environmental Assessment

Section in the Atlantic OCS Region, and in Headquarters as the Chief of Environmental Evaluation Branch, Chief of Environmental Assessment Branch, and finally Chief of the Environmental Division where he oversaw compliance of the offshore programs with environmental regulations.

Mr. Wildermann, he continued, has made sure that the science coming out of MMS studies programs gets translated into use in environmental assessments (EA's) and public policymaking.

Mr. LaBelle went on to explain that the MMS is the largest land manager in the United States (U.S.), albeit submerged lands. Just as the Bureau of Land Management and the National Park Service have responsibility for millions of acres of cultural, natural, and mineral resources, so does the MMS, in the amount of 1.76 billion OCS acres.

As he reported, production from 40 million OCS acres under lease account for about 30 percent of domestic crude oil production and about 25 percent of the domestic natural gas production. These offshore lands are managed from the initial assessment of the resources available to the end of the field's production life, when a company plugs and abandons its wells, and cleans up the surrounding environment.

It is predicted that, by 2006, the OCS will account for about 40 percent of the U.S. oil production. At the same time, it is expected that the OCS will continue to account for about 25 percent of domestic natural gas production.

In the Gulf of Mexico, deepwater production now accounts for about 60 percent of the Gulf's oil production and 23 percent of the natural gas production. Deepwater development projects continue at a fast pace.

Major Issues

Mr. LaBelle explained that the current 5-year oil and gas leasing program runs from 2002 to 2007. There have been five sales held on schedule, with 14 sales remaining. There is a potential for around 22 billion barrels of oil and 61 trillion cubic feet (Tcf) of natural gas to be produced in the areas to be offered. Mr. LaBelle also explained that MMS is starting to prepare its next 5-year planning document, covering 2007-2012, and he hopes that the draft proposed leasing program document will be out by next spring.

Some incentives to promote leasing are in place and will continue. Economic incentives include a royalty incentive program for deepwater leases and expanded incentives to promote development of natural gas from deep drilling in shallow waters. The deep shelf gas royalty relief provisions are also being extended to leases purchased before 2002.

Lease extensions are also being offered for certain exploration activities that focus on targets that occur beneath subsurface salt sheets. The deep shelf gas and sub-salt provisions are specifically targeted at bringing more natural gas production online in the near future, which should help meet the expanding demand for natural gas.

Mr. LaBelle stated that MMS is also developing economic incentives for exploration in offshore waters of Alaska to make sure the process for permitting new wells is the most efficient and effective possible. It is critical that there is a well-managed program of regular lease sales in the areas where exploration is allowed.

Multiple use of the OCS, especially by projects that compete with management of energy and mineral resources, presents a challenge. Traditional competing uses have included fishing, tourism, shipping and boating, military activities, and telecommunications. Now there are new and different uses to consider, such as offshore liquified natural gas (LNG) projects that weren't even on the radar screen a couple of years ago. Other alternative uses are OCS gas storage projects, wind and wave energy projects, and conversion of OCS oil and gas facilities for other uses such as mariculture.

While the U.S. Coast Guard has permitting authority for offshore LNG projects in accordance with the Deepwater Port Act, MMS is heavily involved in reviewing these projects and coordinating the proposed activities with the OCS oil and gas and sand and gravel programs. No fewer than eight LNG project proposals are now pending. Operators of the existing facilities for offshore oil and gas are quite concerned about these issues. As these new projects come on line, they require a way to get the gas to the shore, and that involves space and use conflicts.

However, there is a lack of clear authority by one agency to manage such activities, and this could significantly impede MMS's attempts to ensure orderly development of the OCS. To address this situation, MMS has drafted legislation that would give the Secretary of the DOI the authority to grant rights to the OCS for alternative energy-related uses that are not otherwise covered by existing law. The proposed legislation is included in the comprehensive energy bill that is now under debate and would apply to projects that (1) support exploration, development, production, transportation, or storage of oil and gas and other minerals; produce or support production, transportation, or transmission of energy from sources other than oil and gas; (2) use, for energy or marine-related purposes, facilities currently or previously used for activities authorized under the OCS Lands Act.

The proposed alternative use provisions are included in both the Senate and House versions of the energy bill; however, significant differences on other measures within those bills threaten passage of the energy legislation. It appears that if the differences are not reconciled and the legislation does not move by the July 4th recess, energy legislation will not be enacted by this Congress.

While it is uncertain whether the comprehensive energy bill will be enacted, MMS is determined to address this issue and, if necessary, will pursue other vehicles for Congress to consider alternative energy-related uses of the OCS.

Mr. LaBelle announced that DOI recently held a meeting of the senior managers across all its bureaus. The subject of the meeting was adaptive management, which is basically the strategy by which the department wants to link the adaptive management approach to its National Environmental Policy Act (NEPA) analyses.

A typical NEPA analysis will plan, predict, and implement mitigation to allow the given project to go through in a safe manner. Adaptive management would go beyond the implementation of mitigation by monitoring how well the mitigation is taking care of the problem, evaluating the results of that monitoring, and providing feedback to the original plan.

In this particular meeting, the managers dwelled on the DOI success stories and the not-so-successful stories about adaptive management. One aspect it brings to the table is that it seems to be a very effective way of obtaining more input from State, local, and other communities. Also, in the cases where it didn't seem so successful, one of the stumbling points was FACA and how the public can have access to the decision making without violating the rules of FACA.

Mr. LaBelle stated that he believes that the department will adopt adaptive management as one of its tools for future NEPA work. When that happens, hopefully it will translate into more support for research dollars to monitor and mitigate projects.

He also briefly mentioned the Ocean Commission (OC) report which came out on April 20, 2004. The issues basically include stewardship, support of science, pollution prevention, commerce, transportation, education, integrated ocean observing systems, etc. MMS has been taking a lead role within the DOI to help with the problem of having a coordinated response to the recommendations in this report. He thanked Dr. Kendall on the marvelous job he has done in the background over the last couple of years along with his staff and others in MMS who worked on this issue. Not having read the entire report, Mr. LaBelle said he thinks MMS issues and responsibilities are fairly portrayed, which he believes is quite an accomplishment.

There is a 30-day review period now that is underway, mainly for State governors and others to send their comments on the report to the OC. Then, there will be a 90-day period for Federal Agencies to respond to the recommendations on behalf of the Administration. He stated that there may be a possible role for the SC to be very helpful as MMS goes forward the next few years to evaluate these recommendations and start implementation.

Mr. LaBelle continued by informing the SC that, during the afternoon, they will review the regional study plans for next year and the environmental questions that need answering in order to help MMS manage OCS mineral management development in as safe and environmentally sound a manner as possible. The ESP has been taking progressively larger budget hits recently, and this fiscal year (FY) is expected to be another tough year. Perhaps the call that's in the OC report to increase study funding for ocean issues will help.

Mr. LaBelle closed his discussion by stating that MMS looks forward to the SC's able assistance on some of the key challenges to formulate these research plans on many present and upcoming complex issues.

Open Discussion

Dr. Shapiro requested that the SC be provided with the appropriate portion of MMS's report, and Mr. LaBelle assured that it would be provided digitally as soon as possible.

Dr. Joseph Smith asked Mr. LaBelle to clarify his remarks regarding the regulatory aspects of non-oil and gas facilities on the OCS. What he thought he heard was that the regulatory responsibility for things such as winds and currents hasn't been assigned. Mr. LaBelle replied that it has not been assigned for certain things like wind turbines, but he believes MMS is at the point now where there are proposals to actually go out and do some of this, and Federal regulators are struggling to get an answer.

Dr. Diaz said he thought the energy bill assigned responsibility to MMS. Dr. Kendall replied that it currently does have that responsibility; however, Mr. LaBelle explained that this could be changed prior to approval of the bill.

GULF OF MEXICO OCS REGIONAL OVERVIEW

Presentation by Mr. Chris Oynes

Mr. Oynes thanked the SC for the opportunity to update it on the Gulf Mexico OCS Region's activities.

He gave a review on the use of the EA and environmental review processes, from development of a 5-year program through each lease sale, exploration plan, and development plan documents.

Mr. Oynes presented two strategic trends in the Gulf of Mexico and said that about 95 to 97 percent of all the OCS production comes from the Gulf of Mexico.

Focus on Oil. Deepwater oil production is rapidly growing and has been growing for a number of years. In 1995, there were 55 million barrels of oil produced; this rose to 332 million in 2002. What that shows is about a 530- to 535-percent increase over those years. Both shallow and deepwater OCS production in the Gulf of Mexico are responsible for a very large percentage of all OCS production. Oil production, as a percentage of total domestic supply, has risen from 13 percent in 1992 to 30 percent in 2002, and it is estimated that it may rise as much as 40 percent of all domestic production by the year 2010. However, the denominator indicates that total domestic production is declining. The 40-percent number as an example was contained in the Vice President's energy report issued about 2 years ago.

Focus on Gas. Shallow-water gas production in the Gulf of Mexico has rapidly declined from about 4.7 Tcf a year down to 3.3 Tcf in 2002. Deepwater gas production has not been able to offset the decline in shallow-water gas production. During 1997 through 2000, shallow water gas production was kept at 5 Tcf, and then it started to drop. Mr. Oynes reported that the total production is about 4.5 Tcf at this point in time. The deepwater gas production has not been able to overcome the decline in shallow-water gas production, so total OCS gas production is declining. In order to rectify this, MMS has tried to respond with some incentives in the deep shelf, i.e., shallow water, 600 feet of water and less, but drilling deeper for deeper sediments that is below on the first floor of 15,000 feet total vertical depth or greater. MMS has recently issued a revised estimate of shallow water gas production which is just below 15,000 feet, not the shallow shelf, but the deep shelf, and this might have 55 Tcf of natural gas. One of the thoughts behind the incentives that MMS has now put into place has been that there probably needs to be some encouragement from the Federal Government. Since drilling is taking place below 15,000

feet, there is concern about high pressure, high temperature, corrosion, and cost since different types of equipment are needed and it is very difficult to get to the site. MMS adopted the incentive in two pieces. First of all, the MMS went with new lease incentives. In 2001, MMS adopted a provision that stated if a new lease is acquired and the natural gas well would be drilled below 15,000 feet, the number was 20 billion cubic feet (Bcf) of gas, and it was accomplished in 5 years of the lease terms, the company would be exempt for the first 20 Bcf of gas productions; this amount would be royalty free. Currently, MMS probably has in existence about 7,000+ leases in the Gulf of Mexico. If a new sale is held, 500 to 700 new leases may be issued, and older wells don't get that royalty relief. Therefore, another rule has been applied to existing leases.

What has happened, he further explained, is that gas production has risen in 2002 to about 421 Bcf a year. However, he added, that amount of gas production needs to double, triple, or quadruple just to make up the decline in the existing shallow-water production.

Mr. Oynes gave a PowerPoint presentation which described the Gulf of Mexico's deepwater discoveries and concluded that extremely deep water is beginning to come into play. Ultra deepwater can be defined as 7,500 feet of water depth or greater, and there is a beginning trend of major discoveries in ultra-deep water. Because of the new geology and new water depths, there are going to be new technical research and development problems to contend with. Exploration in ultra-deep water is going to start taking off even more because the geology is starting to firm up, and the discoveries are starting to show through.

He continued that there are about 4,000 production structures ranging from a one-well production facility to various very small types of facilities, to a major platform, such as an 8-pile or 16-pile platform with multiple wells in relatively shallow water. However, he pointed out that there were 1,057 new structures installed since 1995, so there is still a lot of activity going on in the shallow water, even though the shallow water gas number is still declining. New facilities are being installed in spite of declining numbers since new discoveries are being brought on line, and shallow water is still a very strong engine.

About 86 production projects are now installed in deep water. In 1995, there were only five or six in production. Mr. Oynes said that geologists are getting very excited about a brand new geological area in which to play in the Gulf of Mexico since very little known in the ultra-deep water.

Opposing events are occurring in the eastern gulf from the central and western gulf. In the central and western gulf, there are thousands of structures, projects, and activity. In the eastern gulf there is very little activity. The exception is in the Sale 181 area. Sale 181 was the first eastern gulf sale in 14 years, and it was held in December of 2001. What has happened since that lease sale is that industry has jumped on those leases that they bought and is really charging ahead.

One of the things, he continued, that is noteworthy is that, when a line is drawn straight out in the water from Florida and Alabama, Sale 181 is off Alabama and not off Florida. Also, the lease area is not closer than 100 miles from Florida's coast and Florida has been granting coastal zone

consistency to exploration plans there, and everything has moved ahead. Several of these discoveries have been small gas discoveries, and there is now talk that there will be a possible project of development, not just exploration, where the project might have a surface piercing structure (SPAR) located in the central gulf, right on the line between the central and eastern gulf.

Another piece of the shallow-water activity in the Gulf of Mexico involves platform removals and installations which are continuing on the same strategic framework. Roughly, 100 removals and 100 installations a year occur in the entire Gulf of Mexico.

Some other recently completed studies include:

- Stability and Change in Gulf of Mexico Chemosynthetic Communities,
- Northeastern Gulf of Mexico Chemical Oceanography and Hydrography Study,
- Deepwater Physical Oceanography Reanalysis and Synthesis of Historical Data, and
- Social and Economic Impacts of Outer Continental Shelf Activities on Individuals and Families.

Some studies nearing completion are:

- Northern Gulf of Mexico Continental Slope Habitats and Benthic Ecology,
- Exploratory Study of Deepwater Currents in the Gulf of Mexico,
- Cooperative Research on Sperm Whales and Their Response to Seismic Exploration in the Gulf of Mexico – (Sperm Whale Seismic Study – SWSS),
- Effects of Oil and Gas Exploration and Development at Selected Continental Slope Sites in the Gulf of Mexico,
- The Archaeological and Biological Analysis of World War II Shipwrecks in the Gulf of Mexico: A Pilot Study of the Artificial Reef Effect in Deepwater,
- Long-term Monitoring at the East and West Flower Garden Banks, and
- History of Offshore Oil Development in the Gulf of Mexico.

Some challenges facing the Gulf of Mexico OCS Region in the Deepwater Ocean Currents are:

- Several project installations have been delayed by high currents,
- Mobile Drilling Units (MODU) could not disconnect/contribute to incidents,
- Premature replacement of export riser (fatigue), and
- Industry's design criteria was formulated in 1980's - early 90's, and
- MMS is preparing a new Notice to Lessees and Operators (NTL) building off requirements in regulations, and may require full water column measurements by facilities and MODU's.

Mr. Oynes gave a visual on some of the LNG projects that are in the Gulf of Mexico. There are two new ones that have been filed or are about to be filed. These are offshore LNG projects, which will involve bringing in the LNG, re-gasifying it, turning it back into regular natural gas, injecting it into a pipeline, and transporting the gas to market. This process does work, in part, because it is being tied into the existing gas distribution network in the Gulf of Mexico.

A couple of proposals off Florida call for gas to be re-gasified in the Bahamas. Then, new pipelines would be built from the Bahamas to Miami which will bring the gas ashore to be used for power, probably at utility plants in the southern part of Florida.

The amount of gas the country needs versus what there is in the way of production is severely out of balance; therefore, the country is searching for a lot of new supply alternatives to deal with that problem.

Open Discussion

Dr. Michael Rex asked, of the ultra-deep rigs, what are the prospects for the gas? Mr. Oynes responded that it is probably way too early to talk about that, but in general, what has been seen in deep water has been a surprise. The amount of the oil versus gas, to a large extent, is associated with gas rather than gas reservoirs per se. He added that these are broad generalizations.

Mr. Oynes said that he should have mentioned Shell's project on the Great White in the western gulf and one that Shell was drilling recently called Hammerhead – both of these projects are very close to the boundary with Mexico. Either today or tomorrow, a delegation from the U.S., including people from his office, would be meeting with the Mexican government to discuss transboundary development issues or how to deal with something where there is a reservoir that straddles the boundaries of Mexico and the U.S. One interesting question is "if you locate a floating SPAR structure next to the site of the boundary, how is the U. S. going to inspect that?" Also, how are proper measurements going to be ensured in a foreign country's waters? Shell is drilling a well that is about less than a mile from the boundary of Mexico and the reservoir probably straddles the boundary; so these issues need to start to be addressed.

Dr. Mike Castellini asked if, along that analysis of national and international differences, can Mr. Oynes explain the distinctions between the State boundaries and the Exclusive Economic Zone (EEZ) distinctions within the State and Federal regulations. Mr. Oynes responded that it is his understanding that if there are less than 200 miles from the U.S. coast, the dividing line is the mid point. If both coasts can swing 200 miles arcs, EEZ lines, and there is still an area that is in the middle that is further out from both coasts, then that is the gap that needs to be resolved. Mexico was concerned the U.S. would probably develop before it would, so Mexico wanted the boundary set off. As an example, Mr. Oynes thinks it is 1.3 miles on both sides of the line that are set off, which means no lease or issuance of a license can be made for the next 10 years, in effect, to try to protect from drainage. He explained that most of the area is subject to normal international boundaries, and there is no gap. As an example, he said that if the U.S. drilled a well on its side of the line and it was two feet from Mexico and resources were able to be drained from Mexico's side of the line, that's the way it is handled. Of course, Mexico doesn't like that, so that is part of the reason it needs to be discussed. They don't have a rule of capture in their legal system, whereas the U.S. does.

SOME HIGHLIGHTS OF THE MMS ENVIRONMENTAL STUDIES PROGRAM (ESP) AND OUR GOAL FOR THE NEXT DAY AND-HALF

Presentation by Dr. James Kendall

Dr. Kendall reviewed the mission of the MMS, which is to manage the mineral resources on the OCS in an environmentally sound and safe manner, and to timely collect, verify and distribute mineral revenues from Federal and Indian lands.

The ESP's mission is to provide the information needed to predict, assess, and manage impacts from offshore gas and oil and marine mineral exploration, development, and production activities on human, marine, and coastal environments.

He explained that some of the primary ESP customers are internal MMS personnel preparing EA's and EIS's under NEPA. When these documents are being planned and it is realized that some research has not been done on a particular issue, different routes are explored to get that scientific information, and one of the routes is the ESP.

Information generated by the ESP is also used in a more regulatory sense. As an example, Dr. Kendall said that the MMS started doing studies on chemosynthetic communities a decade ago, anticipating possible deepwater activity in the years to come. From this scientific information, MMS developed an NTL which provides a consistent and comprehensive approach to protecting high-density chemosynthetic communities. Thus, information collected through the ESP is not only used for NEPA documents, but also in a regulatory sense.

Dr. Kendall noted that the ESP budget for FY 04 was approximately $17 million. Of that money, 47 percent is being expended in the Gulf of Mexico, and the remainder is split between the other offices. He continued to explain that the $17 million also continues ongoing studies and not just new studies. As for the distribution, the Gulf of Mexico OCS Region got approximately 42 percent; Pacific OCS Region about 14 percent; the Alaska OCS Region 22 percent; and the National Program about 10 percent.

For FY 05, approximately $17 million will be available, with probably 50 percent needed for ongoing or continuing projects.

Budget by Discipline. Disciplines include everything from air quality, biology, fate and effects, minerals (sand and gravel), socioeconomics, and others. Generally speaking, ESP resources have been expended as follows:

Air Quality	14 percent	Biology	18 percent
Fates and Effects	17 percent	Information Management	6 percent
Minerals	3 percent	Pollutant and Transport	30 percent
Endangered and Protected Species	7 percent	Social Economics	12 percent
Other	3 percent		

Currently, there are about 120 ongoing studies in the Gulf of Mexico to the tune of about $56 million; the Alaska OCS Region has 50 studies at $22 million, the Pacific OCS Region has 40

studies at $38 million, and the National Program has 22 studies at $7 million. These change on a regular basis since next week another study may be awarded and two other studies may be completed.

Each Region has its priorities:

- Gulf of Mexico–Deepwater, Decommissioning
- Alaska Beaufort/Cook Inlet–Physical Oceanography, Oil/Ice, Monitoring Marine Mammals
- Pacific–Monitoring, Decommissioning
- National–Modeling, Information Management, Hydrates, and Sand & Gravel

How Does the ESP Work? After determining which studies should be pursued, it is then decided how each study should be procured: either by a Competitive Contract, Interagency Agreement (IA), or a Cooperative Agreement (CA).

Who Works with MMS? Dr. Kendall explained that MMS works with scientists in academia, universities, and the private sector, as well as Federal and State agencies through CA's and IAs.

How Does the Process Work?

- Information needs are assessed annually
- Studies Development Plans are created and prioritized for MMS relevance
- OCS Scientific Committee deliberates
- Needs/priorities are balanced with resources, other stakeholder input, and evolving needs
- A National Studies List is developed
- An appropriate procurement vehicle is determined

Monitoring for Quality

- Information needs are reviewed internally and externally (highly participatory)
- Examined in light of National Research Council (NRC), National Academy of Sciences, and Office of Management and Budget reviews
- OCS SC provides input
- External participation on a Technical Proposal Evaluation Committee (TPEC)
- Scientific/Quality Review Boards
- Peer-reviewed literature is encouraged
- MMS relevance is ascertained
- Recent examples:
  - Sand and Gravel Environmental Studies within the Minerals Management Service: *A Framework for Decisionmaking*; April 2003
  - Thematic Section, *MMS Environmental Studies to Assess the Potential Effects of Offshore Dredging Operations in Federal Waters*; Journal of Coastal Research, Vol. 20, No. 1, Winter 2004

Dr. Kendall mentioned that the ESP is not the only program at MMS which supports research. The Technology Assessment and Research Program looks at engineering concerns; however, occasionally, the two programs overlap, so information and resources are shared. He went on to discuss the following issues.

The National Oceanographic Partnership Program (NOPP). In the OC report, the Commission emphasizes that more money needs to go into ocean research; that it needs to double the current investment of $650 million. One way to increase funding is to partner with other agencies. MMS is a member of the NOPP which consists of 15 Federal Agencies that work together on issues of common concern: technology, research, education, etc. MMS has been a member from the program's beginning, and the MMS Director sits on the National Ocean Research and Leadership Council which is the governing body of NOPP. MMS uses this program to leverage its dollars and also to keep plugged into the bigger picture.

Integrated Ocean Observing System (IOOS). Another high priority issue with the OC is the IOOS which is to develop a sort of a weather channel for the oceans, so that in 10 to 15 years, there may be less of a need to fund oceanography studies because the information is being collected through regional associations of stations tied into a national backbone. The MMS is involved in this because it is a member of NOPP, and it is also a member of the Executive Committee of Ocean.US which was created by NOPP at the request of Congress to manage the development of an Ocean Observing System for the nation.

Ecosystem-Based Management. Another OC issue is ecosystem-based management (not the same as ecosystem management). The Commission defines it as: "U.S. ocean and coastal resources should be managed to reflect the relationships among all ecosystem components, including humans and non-human species and the environments in which they live. Application of ecosystem-based management will require defining geographic management areas based on ecosystem, rather than political, boundaries." Dr. Kendall said that the SC will be discussing a proposed study entitled, *Deepwater Gulf of Mexico Science Review, Critique, and Synthesis and its Ability for an Ecosystem-Based Management Approach.* This proposed study has two intents: to get a program review of what MMS is doing in deep water and also to see if it needs to be tweaked a bit in terms of ecosystem-based management because MMS is the only one out in deep waters of the Gulf of Mexico. Most of the biology, and most of the physical oceanography, that are being done are supported by MMS.

How the U. S. Commission on Ocean Policy, MMS, the SC, and ESP are All Connected.
The public has a poor understanding of the role oceans play in their lives; therefore, an ocean-literate society that is equipped to deal with existing and impending issues and which is able to make choices and influence decisions based on knowledge must be fostered. NOPP's Observation Research Advisory Panel (a FACA committee) sponsored an inventory of education programs and projects supported by NOPP members. MMS and the U.S. Geological Survey (USGS) participated in this inventory. With advice received from the former SC, their prodding, and this inventory, a draft paper resulted entitled *Regulatory Agency's Role In Marine Education: Current and Future Resources.*

To summarize, Dr, Kendall's presentation on the ESP :

- The ESP is Focused on Mission
- Clear Goals & Clear Strategy
- Highly Participatory
- Internal & External Review
- Coordination, Collaboration, & Leveraging

- U.S. Commission on Ocean Policy Recommendations
- Quality Science for MMS Mission
- More Information

Open Discussion

Dr. Shapiro asked for an approximation of how much of MMS's research budget is actually carried out by MMS staff and how much of it is outsourced. Mr. James Cimato replied that about 2-3 percent of the budget is internal.

Mr. Gary Brewer said that he appreciated the nod to USGS but thought a hug would be more deserving. He pointed out that USGS contributes $2.5 million every year specifically to the MMS ESP and about a million of that has been going to the Gulf of Mexico. He added that it is important that everyone in DOI work together and address not only this OC report and its ramifications, but also DOI needs. Dr. Kendall responded that the SC is now concerned with specifically addressing information needs and how they should be done. A lot of work is done by USGS, and it is top notch, but those decisions will come later in the process. For the next day and a half to 2 days, the SC will need to focus on what MMS's information needs are and the science that needs to be done in 2005, 2006, and beyond – then MMS will find the best people.

Overview of the Louisiana State University Coastal Marine Institute (CMI), Louisiana State University

Presentation by Dr. Larry Rouse

Dr. Rouse explained that the first CA was signed between MMS and the State of Louisiana through Louisiana State University (LSU) in 1993, and included 62 projects at a cost of $11,679,604. It was renewed in 1998 and included 43 Projects at a cost of $9,551,828. This second CA expired last September or the first of October 2003, and when matched with LSU funds, the total is over $42 million. Presently, the third CA is being reviewed by LSU program officers, and discussions with MMS Procurement personnel are underway.

The CMI at LSU focuses on:

- Collecting and Disseminating Environmental Information for Decisions
- Addressing Local and Regional Environmental and Resource Issues
- Strengthening the MMS/State of Louisiana Partnership
- High-Quality Local Expertise
- Credible Study Results
- Improving Local Capabilities
- Interdisciplinary Research
- MMS/Louisiana Consensus
- Cost Reduction

The research areas that the CMI covers are:

- Sociology
- Economics

- Toxicology
- Platform Ecosystems
- Meteorology
- Physical Oceanography
- Geomorphology

The schedule the CMI follows is:

- OCT – Issues are identified
- NOV – Letters of Intent (LOI) are solicited
- JAN – LOI's are selected for proposals
- MAR – Proposals are submitted
- APR – Proposals are selected for funding
- JUN – Negotiations and awards

He mentioned that 11 proposals were recently submitted, and at the end of this week or early next week, MMS will decide which of those proposals are going to go forward to the next stage.

One recommendation introduced by the Alaska OCS Region at the previous SC meeting was that CMI's should highlight student participation in projects and programs. Dr. Rouse explained in detail several projects in which graduate students have played an important, if not complete, role in the analysis of the data.

Dr. Rouse has been discussing with Dr. Mary Boatman of the Gulf of Mexico OCS Region ways to bring science education into graduate-level university science projects. Each funded CMI project would have its own education component. The question is how does one get an educator involved in an individual project? One idea he and Dr. Boatman had was to add a separate task in each year with a science education person at LSU, that would be open-ended; that the task for that person would be to go to these funded projects and try to work together to create an outreach project that perhaps can summarize one or more projects.

Open Discussion

Dr. Rex commented that the National Science Foundation (NSF) has a Grade K to 12 program which is a very big and growing program that pays graduate students stipends with the agreement that ongoing research projects be integrated into the secondary school curriculum and work with secondary school teachers. Dr. Rouse explained that his current biggest problem is having someone to chair the oceanography department since there are good students but not enough stipends to get them in. Dr. Rouse said that he would look into that.

ETHICS RESPONSIBILITIES

Presentation by Mr. Art Gary

Mr. Gary discussed the ethics requirements which the SC members must follow since being designated as SGE. He explained that each member is required to submit an annual financial disclosure form at the time of appointment and after each reappointment. He discussed the ethics laws that are also criminal laws and can carry a $250,000 fine or up to 10 years in prison per count.

He explained that an SGE is someone who is appointed as an officer or employee in an Executive Agency for temporary duties with or without compensation – no more than 130 days out of the year.

Mr. Gary stated that the reason the SC members were not designated SGE in the beginning is because the DOI realized it was designating incorrectly. The law does recognize an SGE as someone who is appointed as a representative of an outside group or if the appointment is based on scholarly studies and degrees.

Dr. Shapiro commented that the SC is chosen to represent disciplines with the intent to balance those disciplines. Mr. Gary agreed and explained that since members do represent a discipline, they express their point of view as a member of that discipline, but there is nobody out there who they can go to who really constitutes a body. There is no good way to make sure how one represents a discipline because of all the different points of view within the discipline.

Dr. Rex said that there are a lot of people on the SC who receive extramural funding for research from NSF and asked if there would be a conflict of interest in terms of receiving those funds as an SGE. Mr. Gary said that information on salary and source of funding would need to be revealed when submitting the financial disclosure form. Based on that information and working with working with MMS and the matters that come before the SC, the Ethics Office will be able to determine whether or not there is a conflict of interest. It may not be a conflict of interest, but it does create an issue which needs to be addressed. Mr. Gary said that he has the authority to waive the conflict, but that he can only write a waiver after reviewing the financial disclosure form.

Mr. Gary offered the following information regarding Executive Order 12674:

- Public service is a public trust.
- Employees shall not use public office for private gain.
- Employees shall not solicit or accept a gift from any person or entity seeking official action from or affected by the employee's agency.
- Employees shall not use nonpublic government information to further any private interests.
- Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards promulgated pursuant to this order.

Mr. Gary explained the following ethics laws in Title 18 of the United States Code:

201– Bribery. It is unlawful to solicit or accept a bribe, and a bribe is anything of value that is offered to you in exchange for doing your job a certain way or not doing your job, depending on the circumstances.

203 – Compensation for Representational Activities, and 205 – Representational Activities. With or without pay, an employee, SGE or otherwise, may not represent a third party with certain exceptions before the Federal Government if it is a matter in which the government has an interest or is a party. This only applies to what is called particular matters involving specific parties. A particular matter, generally, is anything that is focused on and affects the legal

interests of an identifiable group or class of persons. So there could be a particular matter that is a general MMS policy. For example, once specific parties are known, such as a contract for a lease sale where the bidders are already known, you have got a particular matter involving specific parties as opposed to a general policy.

Dr. Diaz stated that he is with a State university, and if the State Board asks him to pass on a sand mining issue that MMS and other Federal Agencies would be involved in, would this be something he should or should not do. Mr. Gary responded that if it had been a matter that he had participated in on the SC, then he must avoid representing the university on that matter if it is already known who is going to mine the sand. He added that, if his agreement with the State of Virginia involves a particular matter with specific parties, but he would not be working on the agreement itself but with the science, then it would be okay to pursue the matter.

He added that representation requires an arrangement with ability to speak on behalf of another person and generally requires intent to influence the government on their behalf. There are exceptions, however, for representing self, parents, spouse, children, estate unless personally and substantially involved, grants and contracts with U.S. if approved by Director, and sworn testimony. He suggested the SC avoid problems and limit communications with MMS to matters relating to the OCS SC.

He asked that SC members who have any ethics issues to funnel them through Dr. Kendall who will discuss them with the Ethics Office.

207 – Post Employment – Revolving Door. Mr. Gary explained that this again is tied to particular matters involving specific parties. There are certain things that cannot be done after leaving Federal service for any third party.

The Lifetime Ban states that if you are involved in a particular matter involving specific parties and you were personally and substantially involved through deliberations or review on the committee, then for the life of that matter, not necessarily your lifetime, but for the life of that matter, you may not look at the prohibited activity or communicate or appear before an agency or employee or court on behalf of another party with the intent to influence where the U.S. is a party of the matter.

There is a 2-year ban that covers all particular matters involving specific parties under supervisor's authority in the last year without regard to personal involvement.

Communicating with or appearing before an agency/employee or court on behalf of another with the intent to influence if U.S. is a party or has an interest in the matter is a prohibited activity.

208 – Actions Affecting a Personal Financial Interest – An SGE may not participate personally and substantially in any particular matter in which, to his knowledge, he or any person whose interests are imputed to him under this statute has a financial interest if the particular matter will have a direct and predictable effect on that interest. This means that you may not participate personally and substantially in a matter in which you have a financial interest. Personal, substantial involvement means you actively are doing it and you are participating by deliberation or review, and you have to have knowledge that you or someone whose financial

interest is attributed to you has a financial interest, and there has to be a direct and predictable effect, not necessarily between your action and the financial interest, but between the matter that you are working on and the financial interest. Whose interests are imputed to you? – your spouse, your minor children, your general business partner, any organization in which you are serving as an officer or employee or board member except for the SC. Your employment itself is not disqualifying.

If the matter does focus on your employer uniquely from everybody else or in a very, very small pool uniquely from everybody else, then you need to recuse yourself. Recusal is an agreement not to participate in a particular matter in which the employee has an imputed interest. Or, a waiver can be granted if DOI determines that need because the SGE's service outweighs the potential for conflict of interest created by the financial interest involved.

Mr. Gary suggested that a procedure be created that once the agenda items for a meeting are known, members have an opportunity to identify whether or not there is going to be a financial interest or someone is imputed to you to have a financial interest such that the recusal can be taken care of prior to the meeting.

Dr. Castellini mentioned that many members are directors, chairs, or deans of various schools that receive grants and negotiate with MMS. He wanted to know if this is what Mr. Gary was talking about. Mr. Gary replied that it may be. What will be needed to be known are what the positions are and whether or not there is a fiduciary responsibility. The conflict law applies to those outside groups in which there is a fiduciary responsibility or a significant responsibility. The Ethics Office will probably deem the kinds of offices Dr. Castellini suggested as being significant enough to want to make sure the ethical implications are understood and waivers are issued as necessary. In this case, the Department will probably determine that the need for your services outweighs the potential for conflict of interest brought on by the financial arrangement.

Dr. Shapiro stated that many of the SC members also serve as advisors on other committees or boards and advising these other groups would overlap. She asked if that would cause a conflict of interest. Mr. Gary said that by serving as an advisory to another entity or a board would not be the kind of relationship that would trigger the criminal law; however, it may trigger the appearance of issues that come up about your ability to be impartial.

209 – Dual Compensation. Mr. Gary explained that there are different levels of conflict, but these are lower than the criminal law. This is a law that says for doing your Federal job, all you're entitled to is your Federal pay. This rule does not apply to SGEs even though the government does reimburse travel expenses incurred by the SC.

No Use of Appropriated Funds for Lobbying.

- 18 U.S.C. § 1913 and other laws prohibit using appropriated funds to influence members of Congress or any State, local, territorial or tribal jurisdiction or official to favor or oppose any legislation, law, appropriation, or policy
  - Except if it's your job and only then through proper channels
- No "grassroots" lobbying: You may not tell someone to contact a State, local, territorial or tribal government regarding any pending legislation

- Exceptions: good faith responses to request for information
  - Strictly factual public statements without a slant

Standards of Conduct.

- Gifts from prohibited sources or given because of your position
  - Exclusions: snacks, greeting cards, certificates, plaques, items of little intrinsic value, items paid for by the government, items you pay market value for, discounts available to the public or all government employees
  - Exceptions: Items worth $20 or less (but NEVER cash), waiver of conference fees for speakers, widely attended gatherings, gifts based on personal relationship, outside business or employment, travel expenses incidental to work

Standards of Conduct: Impartiality.

- An SGE must disqualify him (or her) self from any particular matter involving specific parties that would directly and predictably affect the financial interest of:
  - Members of his/her household
  - Close relative or friend
  - Business relationship (but not employer if only interest is salary and employer is not specially affected)

Misuse of Position.

- Use of title or reference to service on the OCS SC
  - Private gain
  - Financial transaction
  - Coerce/induce another to provide benefit
- Use of non-public information
- Unauthorized commitment
- Use of Government property

Political Activity.

- Hatch Act
- No partisan political activity while actually performing duties as an SGE
- May not solicit or accept political contributions or otherwise engage in activities that support a candidate in a partisan election

Open Discussion

Dr. Duane Gill stated that these are public meetings; therefore, basically everything discussed as committee members is open to the public. He asked what the distinction is between being an SC member and the public. Mr. Gary stated that the SC can legally close a portion of its meeting to the public if it is necessary. It cannot have a full-fledged meeting without public notice and having the public available. There may be times when it is appropriate for MMS to want to share information with the SC, but it can't. There are ramifications that are part of the Freedom of Information Act that allow exemption of government agencies. Predecisional delivered documents do not apply to advisory committees but there may be times when it can be structured as such. Dr. Gill then asked if it is okay for an SC member to make a statement or tell somebody

about what went on in this meeting? Mr. Gary answered that it is alright but suggested discretion be used in what is being told. When an SC member wants to express his/her own personal opinion about something, that isn't necessarily that of the agency, he recommended that he/she announce that it is his/her view and not that of the SC, MMS, or the DOI.

Dr. John Trefry asked Mr. Gary to clarify where the SC members stand with respect to receiving research funds or consulting money from MMS or the oil industry. Mr. Gary stated that he did not see any problem with MMS – there is no conflict. There might be some overlap to make sure that if you are being paid to do a certain thing, you are not also doing that certain thing while you are here because it might be in a different capacity. If you are being paid by an oil company, we would want to be able to identify what it is you are being paid for and understanding the nature of your relationship with them. If you are a consultant for them as opposed to an employee of them, there are different effects under these ethics rules.

Dr. Shapiro asked what becomes of the financial disclosure form once it has been submitted. Mr. Gary assured her that all information is confidential and is secure.

Dr. Pat Roscigno asked if an SC member could apply for a grant after being off of the Committee for 2 years. Mr. Gary replied that the member's status while on the SC would need to be analyzed to determine whether it is a particular matter that involved specific parties and is subject to the post employment restriction.

Dr. Rouse asked, as an example, if there is a sand and gravel problem in the Gulf of Mexico and he wants to go after a CMI project, could he ask Dr. Diaz to be a co-person to investigate on it even though he has had some influence in saying MMS needs to look at sand and gravel. Mr. Gary responded that that is a matter of general applicability. As long as at the time that the MMS was considering the general issue of oil and gas, they did not have in mind specific parties who might compete for that contract.

Mr. LaBelle asked if MMS has a new operative quality report on a specific project and has asked experts on the SC to serve on those projects, does it affect those people? Mr. Gary replied that it does and MMS needs to be alert when working on something that has specific parties involved. For example, when MMS is reviewing grant applications involving personal substantial involvement in a particular matter by a specific party, as opposed to sand and gravel generally, that's where the ethic rules apply, and that's where we have to know whether or not there is a conflict.

Mr. LaBelle asked if the Ethics Office is able to grant waivers for it if it is designated in favor of the government. Mr. Gary answered that it can; whether it would be a policy decision to balance, and MMS would be asked to get involved. He explained that a lot of lawyers find themselves in a situation where something is legal, however, it still should not be done. MMS does not want to compromise its overall work to the department or to the bureau.

ELECTION OF CHAIR, VICE CHAIR, AND PARLIMENTARIAN

Prior to recessing for lunch, elections were held. Dr. Mary Scranton nominated Dr. Shapiro for Chair and it was seconded. Dr. Shapiro accepted the nomination. Dr. Scranton also nominated

Dr. Diaz for Vice Chair. No other nominations were received, and they were unanimously elected Chair and Vice Chair respectively.

Dr. Gill was nominated and unanimously elected Parliamentarian of the SC.

The meeting recessed for lunch. After lunch, SC members would convene in their Discipline Breakout Groups to discuss national and regional studies plans.

PLENARY SESSION
April 23, 2003

Dr. Shapiro called the meeting to order. She thanked the MMS staff for pulling this meeting together under extraordinarily difficult circumstances. She also thanked the presenters and those who presented written material with their presentations as well as the SC members.

Since all of the previous subcommittees disappeared along with the original charter, she explained that a new subcommittee structure needed to be reestablished. She asked Drs. Fred Piltz, Cleve Cowles, and Pat Roscigno what subcommittees they feel are still needed. After discussions, it was decided that the following subcommittees would be formed, and members would be appointed during the business part of the SC meeting.

- Deepwater Subcommittee
- Arctic Subcommittee
- Marine Minerals Subcommittee
- Decommissioning Subcommittee
- Gulf of Mexico Social Economic Research Subcommittee

Dr. Shapiro also mentioned that the SC may want to reconsider the structure of subcommittees in terms of the kinds of approaches that are made and give closer-up examinations. She added that some of the members may want to consider whether serving on a particular subcommittee might create a conflict of interest. She also reminded the SC that it can add members to the subcommittees who not members of the SC.

DISCIPLINE BREAKOUT GROUP REPORTS

A. Ecology/Biology

Drs. Michael Castellini, Bob Diaz, Lynda Shapiro, and Michael Rex are members of the Ecology/Biology Discipline Breakout Group. Dr. Castellini presented the report to the SC.

He stated that the group discussed the following issues facing the Regions:

- Gulf of Mexico – High use, turnover and movement into deep water
- Pacific – Decommissionings
- Minerals (Sand and Gravel) – Impacts and new sites
- Alaska – Large area and bio-political impacts.

There had been a presentation by Headquarters on the science review for the Deep Water Gulf of Mexico, and Dr. Castellini affirmed that the group strongly endorses the proposal to conduct the Deep Water Gulf of Mexico Science Review, Critique and Synthesis, and its Applicability for an Ecosystem-Based Management Approach, and encourages external review.

General Recommendations for All of the Regions

- All regions should develop plans for linking biological and physical databases.
- Per OC recommendations, attention should be given to educational projects.

- A conceptual presentation should be prepared for the next meeting on relational databases, how they would be used, what resources would be needed, and how MMS would approach their utilization.
- Summary tables of completed and ongoing studies should be included in the Studies Development Plan.
- Presentations should be consistent with materials provided.
- MMS is commended for responding to a request to archive and make accessible biological material.

Recommendations for the Gulf of Mexico OCS Region

- Chemo III is strongly supported.
- Integration of many pieces into a larger deepwater program is good.
- Merging of oil seep detection, through remote observation, with location of chemosynthetic communities is supported.
- Workshop concept is good.
- Balance between costs for data acquisition and data analysis is a concern, but partnering (e.g., NOPP) may shift it toward analysis.
- Complicated nature of deepwater program does require outside review and study design. Recommend using outside experts to assist in evaluating sampling designs at TPEC level.
- In the interest of ecosystem-based management, strongly encourage continued coordination with Mexico.
- In the interest of Headquarters plans for an overall evaluation of Gulf of Mexico OCS regional studies, it is important that the Deep Gulf of Mexico Benthic Study final report be made available in a timely way.
- Recommend that Chemo III be initiated and that simultaneous work should begin on the parts of SWSS II that require continuity.
- MMS should consider incorporating records for earlier dredging operations in the Gulf of Mexico (station data and species lists) into their relational database.

Recommendations for the Pacific OCS Region

- Given the critical importance of decommissioning, the panel supports the proposed FY 05 projects and the FY 06 Information Transfer Meeting relative to decommissioning.
- Recommend continued and expanded support for the Multi-Agency Rocky Intertidal Network, ecosystem monitoring, and linking relational databases between physical and biological information.
- Encourage continued creative thinking towards future educational programs and outreach.
- Sound (acoustics) is of interest to OCS regions, regulatory agencies, and independent research programs such as the National Oceanic and Atmospheric Administration, Navy, Office of Naval Research, Marine Mammal Commission, Cornell, and other non-government organizations. Recommend that there be coordination between MMS and these other agencies on sound issues to maximize the value of support.

Recommendations for Marine Minerals

- Continue to follow the strategic plan.

- Evaluation and use of dredging windows are supported. The new study, as profiled, is not necessary in light of the National Research Council report, but environmental windows should be adopted and applied. Identification and development of environmental windows should be an integral part of site-specific studies.
- Standard templates for protocols should be specified and evaluated particularly if environmental windows will be applied. A presentation of the template and how it incorporates windows is requested.
- An expanded effort in finding non-shoal sand sources is encouraged. For presentation at the next meeting, develop the environmental criteria for choosing viable sources.
- Representative biological material should be archived with the Smithsonian Institute.

Recommendations for the Alaska OCS Region

- Continue clear and critical linkages among partner agencies and groups on social, biological, endangered species, and compliance issues.
- Continue efforts to exploit new technologies and new tools (e.g., sampling designs, numerical methods of analysis, population genetic structure, instrumentation, and tagging). MMS should support development of cutting edge technologies for environmental study.
- Continue to involve educational elements in programs (e.g., contact the Educational Directorate of the National Science Foundation).
- Critical issues in a vast area have been well identified.
- Inclusion of oceanographic and meteorological information during collection of biological information is encouraged.

Dr. Shapiro suggested creating a subcommittee for database management in which there might be members who are data gurus from other large programs. Dr. Kendall said that recommendation was made last year at the SC meeting; because of the logistics for this meeting and with the new format to try to keep it short, there were two reasons why it was decided not to do it during this session. The main reason is that there is an effort in MMS, called Electronic Government (E-GOV), to coordinate internal MMS data and make it available to the outside world through the OCS connection. Even though it does not deal with the ESP yet, it has been discussed. The environmental component will be reviewed, and data that has been collected from physical oceanography and other programs will be fit into E-GOV. Since the next meeting might be in the Washington, D.C. area, a presentation on the databases currently available and how this issue is handled internally will be made. Also, a presentation by MMS's E-GOV personnel will be made to show the extent of this effort. Dr. Shapiro agreed that this topic could wait until the next SC meeting, but emphasized the importance to consider not only how the database is structured but how it will be most appropriate to query the data.

B. Physical Oceanography

Drs. Denise Stephenson-Hawk, Mary Scranton, and Joe Smith are members of the Physical Oceanography Discipline Breakout Group. Dr. Scranton presented the report to the SC.

Gulf of Mexico OCS Region

1. Hydrate Studies

- Comparison of technologies to localize hydrates is relevant to both safety and environmental mission of MMS.
- Evaluation of methods to develop hydrate resources should be addressed.
- Environmental assessment of mining of the hydrate development on chemosynthetic communities should be addressed.

Hydrate Recommendations

- The 3-D seismic and four component ocean-bottom cable reevaluation will increase the understanding of locations and viability of the deposits and the possible safety issues.
- Interagency cooperation and leveraging are essential.
- Environmental evaluation should not be done until the deposits and recovery techniques are better known.

2. Air Quality (AQ) Studies (FY 06)

- Gulf of Mexico Air Quality Study (GMAQS)
  - Revisit the 1995 study with the new 8-hour pollution requirement using a new emissions inventory. Are the needed data on pollutant and meteorology going to be available?
  - Particulates should be included.
  - Should the Volatile Organic Content flux from the sea surface be included? Perform a "back of the envelope calculation" to determine its significance.
  - This study should be developed better over the next year.
- Meteorological data by satellite.
  - Profile wasn't presented and should be revised before the next meeting.

AQ Recommendations

- The suggestion that the MMS add an AQ specialist to the SC is a good one.
- Encourage cooperation and coordination of the regulatory data gathering (Gulf of Mexico Activities Data System II) and the environmental data gathering (GMAQS).

3. Physical Oceanography

- The program seems to be proceeding very well.

Physical Oceanography Recommendations

- The FY 06 studies on Flower Gardens (with NOAA) need to be justified relative to other MMS needs.
- The Near-Synoptic Hydrographic Surveys with the Mexicans are encouraged.

Alaska OCS Region

- Beaufort Mesoscale Meteorological Study
  - The project should have sea ice in the title and greater emphasis on it.
  - The study may have to nurture the mesoscale meteorological model.
  - The group liked the phased approach in this study.
- Hydrological Modeling Study
  - The project should get river flow data to support this effort. The calculation based on snow cover volume could be valuable.
  - Perhaps the FY 06 study of sea-ice overflood should be moved up in the schedule. These studies should be coordinated.
  - Simple stage height sensors should be considered.
- Boundary Oceanography Study
  - The freshwater component from this should be pulled out and done under the hydrological study.
  - Recommend the eventual study be closely coordinated with bowhead whale and other biological studies.
- High Resolution Bathymetry Study for the Beaufort
  - Recommend doing this study.

Programwide Recommendation. The fidelity of the numerical models depends on the existence of quality data. It is recommended that the ESP design its studies to ensure that collection of data and information can be applied to generate reliable and accurate models.

C. Social Science

Drs. Duane Gill, Richard Hildreth, and Scott Goldsmith are members of the Social Science Discipline Breakout Group. Dr. Gill gave the presentation.

1. Gulf of Mexico OCS Region

- Social and Economic Planning Conference, February 2004.
  - Proceedings should go to participants before it is finalized.
  - Household economic well-being should be included.
  - Examine other economic and social activities that influence the dynamic context within which Gulf of Mexico OCS development occurs.
  - Changes in industry are the major drivers of social and economic impacts.
  - An industry life-cycle model should be expanded based on the cultural impact paradigm.
  - The cultural impact paradigm can be done to a large extent in-house.
  - Combine monitoring with the cultural impact paradigm.
  - The group found the workshop proceedings document useful as a contextual basis for reviewing the study plan.
  - The next step is for the Gulf of Mexico OCS Region to prioritize and synthesize themes in the workshop proceedings document.
  - Prioritization means making the best use of limited resources.

  - Develop a strategy for prioritizing information needs; this may take the form of in-house monitoring with industry rather than an ESP study.
  - Focus information needs on targeted issues that have been less developed in EIS's.
- Monitoring Industry Labor Needs–Study Profiles
  - Working with the Bureau of Economic Analysis and the Census Bureau to make surveys more compatible with MMS needs is a good approach.
  - Previous study was a good-faith effort demonstrating the limitations of using a broad-based survey approach.
  - Consider using alternative methods to collect targeted information.
  - Develop an in-house description of industrial structure to serve as a basis for gathering information.
  - Conduct focus groups with key industry informants.
  - Develop survey instruments based on input from the focus groups.

2. Alaska OCS Region

- Exploring Potential Visual Resource Effects from Oil Development in Cook Inlet
  - Consider other development activities in the area and how this may change the demographic make-up of the community (copper mine).
  - Consider using virtual image simulations of the view shed.
  - Include residents as wells as tourists and visitors in the survey.
  - Consider acclimation effects
- Dynamics of Distribution and Consumption of Subsistence Resources in Coastal Alaska
  - Broaden 'sharing' beyond food.
  - Consider using social capital as a theoretical framework.
  - Remember diabetes is a major health issue for indigenous people in Alaska.
- Conference Management and Reports on MMS Results
  - Fits with recommendations for educational components of MMS.

National Recommendation. Simplify the scope of work for Energy Alternatives and the Environment, and contract it to an outside entity.

Dr. Goldsmith added that although a lot of time was spent talking about the results of the Gulf of Mexico OCS Workshop, he emphasized that MMS is dealing with a very dynamic industry in oil and gas in the gulf, and the traditional way of keeping on top of that from an economic and social perspective has always been to do a point-in-time study – kind of a cross section of taking a picture of what the industry is looking like. The problem with this technique is that as soon as the picture is taken and developed, the industry has changed, and the picture is no longer accurate. Therefore, one of the things discussed was how to monitor, on a more continuing basis, the conditions in the industry and keep current on what is going on in the industry in terms of labor supply or labor demands and composition of inputs going into various types of production. These conditions vary fairly quickly as the industry moves further offshore and into deeper waters. One of the recommendations made was to consider alternative ways of keeping abreast of what industry is doing rather than what has occurred every 5 years.

He continued that another topic discussed was, since the MMS already has a lot of experience in the Gulf of Mexico doing social and economic impact studies, it needs to begin considering what is different this time rather than doing the same study again; it needs to concentrate on those aspects of impact that are different from the last time. This would also have an added benefit of perhaps freeing up some resources which will enable MMS to look at some of the impacts that may have fallen through the cracks in previous studies because there just weren't enough resources to devote to them.

Dr. Castellini had one comment for the Alaska OCS Region. He stated that there are large National Institute of Health-supported studies being conducted in Alaska (with collaborations between the Alaska Native Health Service, the universities, and a variety of hospitals in communities) trying to look specifically at the subsistence foods relative to health issues. He mentioned that he could help the Region get in touch with the people who do those things.

Dr. Shapiro made one comment regarding the Discipline Breakout Groups; she suggested it would be helpful when presenting the reports to have a sentence which explains why the MMS is supporting this research. Dr. Kendall replied that, from now on, this would be done.

Dr. Hildreth stated that Dr. Jack Irion's socioeconomic presentation to the Social Science Discipline Breakout Group on marine archeology was absolutely fascinating and suggested that during next year's preliminary session, either that very same presentation, or an update of it, be presented to the entire SC.

Dr. Kendall introduced Dr. Ed Richardson who announced that there is a new report being published – a 2004 edition of the *Deep Water Report for the Gulf of Mexico*. Its availability will be announced by the MMS Director at the Offshore Technology Conference in Houston on Wednesday, the 5th of May. This is a 2-year update from the last version and it is the fourth version that MMS has been through in the deep water, and it characterizes activities from leasing to the decommissioning, and Dr. Richardson encouraged the SC to obtain a hard copy or compact disc. In addition, copies will be available on the internet that are set up by key segments which will allow members to examine these characterizations.

Presentation of Plaque

Dr. Kendall stated that Dr. Goldsmith was elected and nominated to the SC in 1999 and has recently rotated off. Dr. Lee Huskey, a former SC member who works with Dr. Goldsmith, agreed to fill in for the remaining time of Dr. Goldsmith's appointment. However, since Dr. Huskey was not able to attend this meeting and the Social and Economic Discipline needed to be covered, Dr. Goldsmith was kind enough to attend this meeting and participate. Dr. Goldsmith was then presented with a plaque and a letter signed by the Director stating MMS's appreciation for his being on the SC.

OPEN DISCUSSION OF SUBCOMMITTEE REPORTS

The next objective was to discuss the Discipline Breakout Group reports and find the common denominators so that when the draft Letter to the Director is created, those recommendations that are programwide and other comments will be appended to the letter.

Database Management. Although MMS may be developing the E-Gov models, it is still going to take a lot of adapting to the needs of the ESP. In addition to the database formatting, data query sets and how to query disparate data sets need to be considered since they are particularly important to those who depend on data collected by other agencies.

Therefore, one of the major considerations for the next meeting should be setting up data sets in such a way that they may be readily queried and then learning how to query the different databases from the other agencies.

Dr. Rex concurred and stated that the key to database management is the professional advantage; the database has to be protected, quality controlled, developed, and made available in a way that is sensitive to the needs of the organization and to answer the kinds of questions that will be posed. It also has to interface well with analytical tools that people are going to be using to synthesize those data. People do not realize that it must be professionally managed, which presents an immense, complex, and complicated problem.

Dr. Piltz encouraged the SC members, between now and the next meeting, to carefully consider how databases and data and information management could best serve the MMS. Dr. Shapiro agreed and added that there are a very large number of different levels that need to be considered. Data needs to be made available to a much larger community, but it needs to be developed in such a way that it is very useful to MMS, within the program, and also to others.

2003 Decommissioning Workshop. Dr. Hildreth said that, at his initial SC meeting in Anchorage, the Decommissioning Subcommittee was formed and that the Pacific OCS Region seemed to have done a lot of homework in this arena to prepare for the October 2003 Decommissioning Workshop. He had been given the 1997 proceedings of a workshop and suggested that, in future work, these and the October 2003 proceedings be referred to since there is a lot of the groundwork including the socioeconomics, legal aspects, and permitting process in those proceedings.

Ocean Commission Report. On behalf of the SC, Dr. Shapiro requested a copy of the executive summary of the OC report, specifically those portions that refer to MMS.

Requests for Proposals (RFP's). Dr. Trefry said that MMS needs to consider peers to review RFP's and that distribution needs to be broadened in order to make more people aware of the opportunities.

Dr. Rex made a general comment that there are two new kinds of technology that MMS needs to develop a stronger awareness of: (1) a genetic component to the biological studies because it can answer definitively, in many cases, questions that arise and (2) samplings. A lot has been

developed about sampling design and the kind of statistics that can be used to answer specific questions about whether there is an anthropogenic effect on it. Although this is very new and technical, it should be incorporated into those RFP's that specifically address this, and the TPEC should have the kind of expertise that can critically evaluate those things with respect to questions that are being asked.

Dr. Shapiro said that one of the overall issues that she has heard is better coordination between biological and physical components of the different programs in the regions. Often, these components are handled as separate programs; if integrated, more information might be yielded. Although she commended the Regions where interdisciplinary programs have been developed, she encouraged this practice be continued and done wherever possible to combine the biological and physical components of the program in order to evaluate the organization of the data in terms of the full complement of other data.

Another comment Dr. Shapiro made is the importance of partnering wherever possible to leverage the maximum benefit from available funds. Again, although this practice is already done very well, it should be continued.

Dissemination of RFP s. Dr. Diaz stated that there are several organizations that manage E-mail servers and suggested that they be given the RFP's to distribute to their members. Dr. Shapiro added that she, too, receives notices about RFP's directing her to a website for further details if she is interested in the subject. She suggested that the titles and the subject be broadcast using this type of list, along with the Universal Resource Locator for those who want further detail. Other suggestions were to announce the RFP on the MMS's website and maintain a mailing list of those interested in receiving them. Dr. Kendall agreed that these were excellent points.

Mr. Cimato explained that competitive procurements must be first announced as small business set-asides; this is a Federal requirement received from the Small Business Administration that creates goals for the Federal Government to allocate a certain percentage of the acquisitions. In MMS, the goal for acquisitions is to first offer 50 percent of all acquisitions to small businesses. When a project is identified for a competitive procurement, it is first developed as a request for interest that is announced through *FED BIZ-OPS*. If two or more small businesses have the capability to meet the requirements, then MMS must negotiate with them for the work. If less than two small businesses demonstrate capability, then MMS is free to proceed with an unrestricted procurement, in which case all entities are able to compete.

Dr. Castellini asked Mr. Cimato what is the historical percentage that contracts have been awarded to small business set-asides. Mr. Cimato explained it is his understanding that MMS has, in fact, awarded on the order of 40 percent of its acquisitions to small businesses, which is for total acquisitions and not just studies; studies is a much bigger number.

Dr. Shapiro asked if the small businesses contracted actually do the work or do they function as coordinators and subcontractors? Mr. Cimato replied that it is a mix, and there are a few projects that have gone to small businesses in the past, so that there is not a real good history. This is the first year MMS has developed this request for interest approach, where there is screening and

specifically directing procurements as small business set-asides as a result of the screening step. Dr. Piltz explained further that a small business can essentially front for a much larger business or university; however, the small business has to do at least 51 percent of the work and cannot, for example, bid on a $5 million contract and, then, for a half million dollars, go to a major corporation.

Outreach. Dr. Diaz added that one of the recommendations from the last SC meeting was to bring science into the classroom by investigating additional ways to turn MMS research products into educational and outreach material. Another recommendation was for CMI student participation.

OPEN DISCUSSION OF SUBCOMMITTEE REPORTS

The following subcommittee structure and membership was moved by Dr. Kosro and seconded by Dr. Hildreth. The motion was then passed by the SC unanimously.

OCS Scientific Committee Deepwater Subcommittee

Jim Coleman	Will Schroeder
Mike Rex	Joe Smith
Mike Kosro	

OCS Scientific Committee Arctic Subcommittee

Michael Castellini	Will Schroeder
Lee Huskey	Lynda Shapiro

OCS Scientific Committee Marine Minerals Subcommittee

Jim Coleman	Duane Gill – Chair
Bob Diaz	Livingston Marshall
Richard Hildreth	

OCS Scientific Committee Decommissioning Subcommittee

Livingston Marshall	Mary Scranton
Richard Hildreth	Mike Kosro

OCS Scientific Committee Social Economic Research Subcommittee

Duane Gill	Richard Hildreth
Lee Huskey	Edella Schlager

PUBLIC COMMENT

Dr. Liesel Ritchie explained that she is with the Social Science Research Lab at Mississippi State University. Although she had no comments, she did ask who, within the MMS, she should discuss problems regarding data management issues. Through the Department of Agriculture, she has recently assisted with a Cooperative State Research, Education, and Extension Service, and she did some facilitation of bringing to the table their issues which needed to be addressed. Some of the items being discussed by the SC brought to mind how that Department addressed

some of these items a couple of years ago and has now moved further down the road on the process. She offered her expertise to help MMS with that area. Dr. Kendall requested that she contact him.

Dr. Rex motioned to close the public comments period; Dr. Kosro seconded the motion; SC unanimously passed the motion.

COMMITTEE BUSINESS

Emerging Issues/Topics of Interest.

Dr. Diaz raised the emerging issues and topics of interest from the previous SC meeting:

- MMS should continually monitor the environmental data it collects as well as advances in sampling technology and data analysis in order to continuously refine procedures or assigning appropriate distances for separation between OCS activities and resources designated for protection;
- Decommissioning;
- MMS should start considering the relationship between OCS activities and marine protected areas;
- Shifting emphasis in contaminant risk assessment from body burden to affect;
- Cooperation between Canada and U. S. on possible oil and gas development.

Dr. Diaz asked the SC to recommend additional issues and which previous issues/topics of interest should be included in the Letter to the Director. The SC decided on the following items:

- Encourage MMS to continue and expand its cooperation with other agencies to address issues concerning acoustics and seismic effects on marine mammals;
- Encourage MMS to continue its coordination with other agencies and to also review and coordinate with other agencies, as appropriate, on alternative uses of the OCS; also, the bureau should feel free to bring before the SC issues of relevance to the ESP;
- Welcome information from MMS on how ratification of the Law of the Sea Convention will affect OCS activities, in particular those pertaining to deep water, and welcome requests for assistance from the studies program.

Other Business. Dr. Castellini asked Dr. Kendall what he predicts in terms of ESP budget. Dr. Kendall replied that over the last couple of years it has been relatively stable – about $17 million. Also, there is a small pot of money, about $2 million that the USGS has made available to MMS for MMS research issues. There is talk of a potential cut in FY 06; however, the amount is not known. The DOI is recognizing how important the studies program is and that it already has a bare-bones budget. He added that he suspected, based on recommendations of the OC, that MMS should receive additional resources. Recognizing the fact that MMS is making an effort to reach the public and becoming more recognizable, Dr. Kendall said he is hopeful the budget will increase. He added that MMS is still trying to increase the cooperation leverage within the NOPP agencies.

Dates and Locations for the Next Meeting. Since the 2003 meeting had been held in Anchorage, Alaska, and the 2004 meeting took place in New Orleans, Louisiana, it was decided that the 2005 SC meeting would be held in the Washington, D.C. area probably in April. It was

decided that dates would be solicited via E-mail in order to give members time to review their schedules. Once a consensus is decided, members will be notified via E-mail of the dates for the next meeting.

Dr. Trefy motioned that the meeting be adjourned, and it was seconded by Dr. Rex. The motion was carried, and Dr. Diaz adjourned the meeting.